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Letter to the Editor

## Recognition × identification

Cadaveric recognition by family members is a procedure performed in various departments of forensic medicine and this practice should not be regarded as a reliable method of human identification<sup>1</sup> because the level of conservation of the body and the similarity between individuals can confuse family members who are already emotionally disturbed, leading to errors in giving bodies for burial. However, in certain situations, such as in mass disasters,<sup>2</sup> the recognition of personal belongs or special signs by family members constitutes an important factor for the reduction of the number of bodies to be analyzed and to direct to a secure human identification.

To that end, a person's identity must be obtained through several reliable forensic techniques, reconstructive (forensic anthropology) or comparative ones (analysis of fingerprints, forensic dentistry or DNA), which methods can be applied together or separately.<sup>3</sup> Depending on the state of conservation of the corpse and on the presence and quality of antemortem records, a certain forensic technique for identification tends to be more effective than others in order to positively correlate the identity of a missing person to an unidentified body.

The use of PA radiographs of the skull, produced in life, is an appropriate parameter for human identification due to the possibility of X-ray analysis of the contour of the frontal sinus, which is an intraosseous cavity, three-dimensional and with a unique contour in each person. 4,5 During the analysis of antemortem and postmortem X-rays of frontal sinus, a direct comparison is the most widely used technique and so reported in literature, but the results of this practice are related to the observer's experience, a factor that often requires the search for more objective, measurable or quantifiable criteria.<sup>5</sup> Obtaining a postmortem PA radiograph in the same position of the one produced in life is a difficult task because there are numerous factors involved in this process (type of radiographic equipment and distortion, positioning of the skull, etc.).<sup>5</sup> It is not possible to reproduce exactly the same position since the deviation of the skull in the axial, anteroposterior and laterallateral axis produce changes in the final image of the frontal sinus, which will be analyzed in two dimensions.

So, how could one explain the differences between measurements performed directly on radiographs? One way was to try to identify the level of distortion between the measurements obtained from radiographs by means of a simple division between the parameters proposed by Ribeiro. It is obvious that achieving these indicators alone cannot be considered a single-factor for human identification is since similar radiographic contours of the frontal sinus can be found in the same population, when analyzed in an X-ray (two-dimensional).

Therefore, what the authors demonstrated in their work<sup>5</sup> was not a revolutionary method of human identification, but an alternative way of objective analysis of the radiographic outline of the frontal sinus, that can be used in combination with other forensic techniques in order to establish a positive and reliable identification.

Conflict of interest None declared.

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